

AMENDMENTS TO THE CLAIMS

- At the time of the action: Claims 1-5, 7-10, and 12-20.
- Amended Claims: Claims 1, 10, and 15.
- After this response: Claims 1-5, 7-10, and 12-20.

1. (Currently Amended) A method of processing media content utilizing a multimedia application program interface (API) which automatically identifies and adapts to a processing system such that the multimedia API facilitates the interoperability of one or more decoder applications with one or more video decoder accelerators, the method comprising:

generating a motion compensated prediction of a region of media content;

receiving an indication of whether there are first and second quantities of residual samples remaining for refining the prediction, on a per-region basis, wherein the indication comprises one or more values associated with one or more picture-level parameters;

adding of the first quantity of residual samples to the prediction to generate a refined prediction value, when so indicated;

subtracting the second quantity of residual samples from the refined prediction value to generate a final representation, when so indicated;

sending prediction control information necessary for generation of a motion compensated predicted region to an accelerator;

sending an indication to the accelerator of whether the first and second quantities of residual samples are to be applied; and

performing subsequent processing and/or rendering at the accelerator.

2. (Original) A method according to claim 1, wherein the first and second residual samples are eight-bit signed samples.

3. (Original) A method according to claim 1, further comprising performing an inverse discrete cosine transformation of a decoded transform-domain representation of a total residual difference to be added to the motion compensated prediction for the region of media content.

4. (Previously Presented) A method according to claim 1, wherein the region of media content is a block or a macroblock of a frame of received media content.

5. (Original) A method according to claim 1, wherein generating a prediction of media content is performed by a graphics processing accelerator under the control of a decoder application that is executing on a host computing system.

6. (Previously Canceled).

7. (Previously Presented) A method according to claim 1, wherein the region is a block or a macroblock of a frame of media content.

8. (Previously Presented) One or more computer-readable storage media having computer-readable instructions stored thereon which, when executed by a computer, implement a method according to claim 1.

9. (Previously Presented) A computing system comprising:
a computer-readable storage medium including a plurality of executable instructions; and

an execution unit, coupled to the storage medium, to execute at least a subset of the plurality of executable instructions to implement a method according to claim 1.

10. (Currently Amended) One or more computer-readable storage media having computer-readable instructions stored thereon which, when executed by a computer, comprising the computer instructions to:

implement a decoder of media content to generate a motion compensated prediction of at least a region of media content, to receive an indication of one or more sets of samples of residual information to further refine the prediction, wherein the indication comprises one or more values associated with one or more picture-level parameters, and to add a first set of such samples to the prediction to generate a modified prediction, if indicated, and to subtract a second set of such samples from the modified prediction to generate a final motion compensated prediction of the region, if indicated, and wherein the executable instructions on the storage medium cause prediction control information necessary for generation of the motion compensated prediction and the

indications of whether the first and/or second quantity of residual samples are to be applied and the actual first and second sets of residual samples to be sent to an accelerator communicatively coupled to the decoder by a multimedia application program interface (API) for subsequent processing and/or rendering, wherein the API automatically identifies and adapts to the decoder and the accelerator such that the multimedia API facilitates the interoperability of one or more decoders with one or more accelerators.

11. (Previously Canceled).

12. (Previously Presented) One or more computer-readable storage media according to claim 10, wherein the region of media content is a block or a macroblock of a frame.

13. (Previously Presented) One or more computer-readable storage media according to claim 10, wherein the first and second residual samples are eight-bit signed samples.

14. (Previously Presented) One or more computer-readable storage media according to claim 10, further comprising performing an inverse discrete cosine transformation of a decoded transform-domain representation of a total residual difference to be added to the motion compensated prediction for the region of media content.

15. (Currently Amended) A system implemented at least in part on a computing device, comprising:

a decoder application to receive a region of media content and control generation of decoded media content; and

an application program interface (API), communicatively coupling the decoder application with a hardware accelerator by way of at least one of a plurality of autonegotiation structures to identify a media processing capability of the system and one or more operational data structures to negotiate processing of the region of media content between one or more system elements, wherein if the API receives an indication of one or more sets of residual samples, the first set of samples is added to a motion compensated prediction to generate a refinement of a prediction value, when so indicated, and a second set of samples is subtracted from the refined prediction value to generate a final representation, when so indicated, wherein the API automatically identifies and adapts to the decoder and the hardware accelerator such that the multimedia API facilitates the interoperability of one or more decoder applications with one or more hardware accelerators.

16. (Previously Presented) A system according to claim 15, further comprising:

an accelerator, communicatively coupled to the decoder application via the API, to receive control and residual data information for subsequent processing and/or rendering.

17. (Previously Presented) A system according to claim 15, wherein the decoder application generates the residual data samples utilizing an inverse discrete cosine transformation of a decoded transform-domain representation of a total residual difference to be added to the motion compensated prediction for the region of media content.

18. (Previously Presented) A system according to claim 15, wherein the region of media content is a block or a macroblock of a frame.

19. (Previously Presented) A system according to claim 15, further comprising:

a storage medium comprising a plurality of executable instructions; and
an execution unit, coupled to the storage medium, to execute at least a subset of the plurality of executable instructions to implement the API.

20. (Previously Presented) A system according to claim 19, wherein the execution unit executes at least a subset of the plurality of executable instructions to implement the decoder application.